

K090507

**LDR Spine ROI Interbody Fusion System
ROI-A Implant System**

510(k) Summary of Safety and Effectiveness

JUN 25 2009

SUBMITTED BY LDR Spine USA
4030 W. Braker Lane, Suite 360
Austin, TX 78759

**FOREIGN ESTABLISHMENT
REGISTRATION NUMBER** 3004788213

**US AGENT ESTABLISHMENT
REGISTRATION NUMBER** 3004903783

CONTACT PERSON Noah Bartsch
Manager, Clinical, Regulatory and Quality Affairs
Phone: 512-344-3319
Fax: 512-344-3350

DATE PREPARED February 24, 2009

CLASSIFICATION NAME MAX 888.3080- Intervertebral Fusion Device
with Bone Graft, Lumbar
MQP 888.3060 - Spinal Intervertebral Body
Fixation Orthosis

COMMON NAME Intervertebral Body Fusion Device (MAX)
Spinal Vertebral Body Replacement Device
(MQP)

PROPRIETARY NAME LDR Spine ROI Interbody Fusion System
ROI-A Implant System

DEVICE DESCRIPTION

The ROI-A System is part of the ROI Interbody Fusion System family, and is comprised of various sizes and configurations of implants to accommodate individual patient anatomy. The ROI-A is intended to be used for interbody fusion of the lumbar spine, and is also indicated for use as a partial vertebral body replacement of the thoraco-lumbar spine.

INDICATIONS:

When used as an intervertebral body fusion device, the ROI Interbody Fusion System is indicated for intervertebral body fusion of the lumbar spine, from L2 to S1, in skeletally mature patients who have had six months of non-operative treatment. The device is intended for use at either one level or two contiguous levels for the treatment of degenerative disc disease (DDD) with up to Grade I spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The device system is designed for use with supplemental fixation and with autograft to facilitate fusion.

When used as a vertebral body replacement device, The ROI System of implants is indicated for use to replace a vertebral body that has been resected or excised due to tumor or trauma/fracture. The device is intended for use as a partial vertebral body replacement in the thoracolumbar spine (from T1 to L5) and is intended for use with supplemental internal fixation. Supplemental internal fixation is required to properly utilize this system. These devices are intended to be used with autograft or allograft bone.

The ROI-A implants are intended to be implanted singularly.

COMPARISON TO THE PREDICATE:

Minor design modifications were made to the Predicate ROI-A System, resulting in the Proposed device design. The Predicate and Proposed devices have the identical intended uses, indications, materials of manufacture, processing, packaging, and surgical technique.

PERFORMANCE DATA:

Clinical performance data was not required to support this submission.

The results of non-clinical (laboratory) validation testing demonstrate that the proposed design changes provide reasonable assurance of safety and effectiveness.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

JUN 25 2009

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

LDR Spine USA
% Noah Bartsch, M.S., R.A.C.
4030 W. Braker Lane, Suite 360
Austin, TX 78759

Re: K090507

Trade/Device Name: LDR Spine ROI Interbody Fusion System; ROI-A Implant System
Regulation Number: 21 CFR 888.3080
Regulation Name: Intervertebral Body Fusion Device
Regulatory Class: Class II
Product Code: MAX, MQP
Dated: May 22, 2009
Received: May 26, 2009

Dear Mr. Bartsch:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

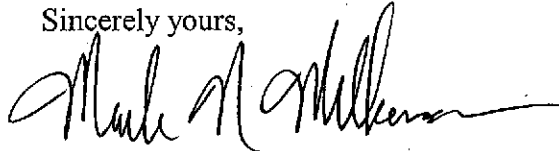
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 – Mr. Noah Bartsch, M.S., R.A.C.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark N. Melkerson", written in a cursive style.

Mark N. Melkerson
Director
Division of Surgical, Orthopedic
and Restorative Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

INDICATIONS FOR USE

510(k) Number (if known):

Device Name: LDR Spine ROI Interbody Fusion System – ROI-A Implant System

Indications for Use:

When used as an intervertebral body fusion device, the ROI Interbody Fusion System is indicated for intervertebral body fusion of the lumbar spine, from L2 to S1, in skeletally mature patients who have had six months of non-operative treatment. The device is intended for use at either one level or two contiguous levels for the treatment of degenerative disc disease (DDD) with up to Grade I spondylolisthesis. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The device system is designed for use with supplemental fixation and with autograft to facilitate fusion.

When used as a vertebral body replacement device, The ROI System of implants is indicated for use to replace a vertebral body that has been resected or excised due to tumor or trauma/fracture. The device is intended for use as a partial vertebral body replacement in the thoracolumbar spine (from T1 to L5) and is intended for use with supplemental internal fixation. Supplemental internal fixation is required to properly utilize this system. These devices are intended to be used with autograft or allograft bone.

The implants are intended to be implanted singularly (for ROI-A).

Prescription Use X
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF
NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

 (EXT for MxM) 6/24/09
(Division Sign-Off)
Division of Surgical, Orthopedic,
and Restorative Devices

510(k) Number K090507